

## Crawford County

### Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors 6/25/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 21 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Crawford County economy.<sup>1</sup>

These 21 sectors have a total direct output of approximately **\$594.4 million** and support **1,856 jobs** in Crawford County. Running the model for all 21 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Crawford County Economy					
Contribution Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>
<b>Direct Effect</b>	1856.0	7.89%	\$109,434,527	7.49%	\$594,382,546
<b>Indirect Effect</b>	687.9	2.92%	\$48,583,071	3.32%	\$100,834,198
<b>Induced Effect</b>	316.3	1.34%	\$19,458,870	1.33%	\$36,718,102
<b>Total Effect</b>	2860.2	12.15%	\$177,476,468	12.14%	\$731,934,847

As shown in the above table, agriculture, food, and food processing sectors support **2,860 jobs**, or **12.15%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 21 agriculture, food, and food processing sectors is approximately **\$177.5 million**, or **12.14% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **527 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Crawford County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment		
Sector	Total Employment	Total Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	526.7	\$42,403,962
Meat processed from carcasses	511.7	\$252,100,576
Wholesale trade	234.6	\$35,064,424
Dog and cat food manufacturing	107.6	\$134,819,506
Grain farming	97.2	\$24,760,193
Support activities for agriculture and forestry	96.2	\$993,190
Landscape and horticultural services	95.9	\$4,112,544
All other crop farming	92.0	\$5,008,597
Management of companies and enterprises	81.6	\$14,449,561
Bread and bakery product, except frozen, manufacturing	72.4	\$9,939,331

The meat processed from carcasses sector directly contributes approximately **\$252.1 million** to the Crawford County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output		
Sector	Total Employment	Total Output
Meat processed from carcasses	511.7	\$252,100,576
Dog and cat food manufacturing	107.6	\$134,819,506
Other animal food manufacturing	50.5	\$63,661,843
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	526.7	\$42,403,962
Wholesale trade	234.6	\$35,064,424
Oilseed farming	34.8	\$25,491,787
Grain farming	97.2	\$24,760,193
Dairy cattle and milk production	46.0	\$15,312,328
Management of companies and enterprises	81.6	\$14,449,561
Bread and bakery product, except frozen, manufacturing	72.4	\$9,939,331

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Crawford County economy.

<b>All Agriculture, Food, and Food Processing Sectors</b>		
<b>Sector</b>	<b>Total Employment</b>	<b>Total Output</b>
Oilseed farming	34.8	\$25,491,786.96
Grain farming	97.2	\$24,760,192.87
Vegetable and melon farming	0.5	\$89,225.26
Fruit farming	3.2	\$232,895.21
Tree nut farming	1.2	\$161,672.28
Greenhouse, nursery, and floriculture production	8.2	\$1,012,683.39
All other crop farming	92.0	\$5,008,597.37
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	526.7	\$42,403,961.18
Dairy cattle and milk production	46.0	\$15,312,327.38
Poultry and egg production	0.4	\$230,302.91
Animal production, except cattle and poultry and eggs	8.7	\$757,127.52
Commercial hunting and trapping	11.7	\$229,445.73
Support activities for agriculture and forestry	96.2	\$993,189.57
Dog and cat food manufacturing	107.6	\$134,819,503.78
Other animal food manufacturing	50.5	\$63,661,842.35
Meat processed from carcasses	511.7	\$252,100,585.94
Bread and bakery product, except frozen, manufacturing	72.4	\$9,939,330.10
Frozen cakes and other pastries manufacturing	1.5	\$239,375.23
All other industrial machinery manufacturing	32.8	\$7,543,425.08
Veterinary services	56.8	\$5,282,536.51
Landscape and horticultural services	95.9	\$4,112,544.06

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Crawford County, the retail sector was omitted.